

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILIN	NG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,170	03/31/2004		Keiichi Fukuda	3520.103	4483
28410	7590	08/25/2005	ě	EXAMINER	
BERENATO 6550 ROCK		& STAVISH, L	PATEL, VINOD D		
SUITE 240	SI KING DI	KIVL	ART UNIT	PAPER NUMBER	
BETHESDA	BETHESDA, MD 20817				

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		$\mathcal{M}$
	Application No.	Applicant(s)
	10/813,170	FUKUDA ET AL.
Office Action Summary	Examiner	Art Unit
	Vinod D. Patel	3742
The MAILING DATE of this communication Period for Reply	appears on the cover sheet wi	th the correspondence address
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication  If NO period for reply is specified above, the maximum statutory pe  - Failure to reply within the set or extended period for reply will, by st Any reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNIC R 1.136(a). In no event, however, may a re to riod will apply and will expire SIX (6) MON tatute, cause the application to become AB	CATION.  eply be timely filed  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 3	1 March 2004.	
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ -	This action is non-final.	•
3) Since this application is in condition for allo	·	• •
closed in accordance with the practice und	er <i>Ex parte Quayle</i> , 1935 C.D	. 11, 453 O.G. 213.
Disposition of Claims		
4) ☐ Claim(s) 1-10 is/are pending in the applicate 4a) Of the above claim(s) is/are with 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-10 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction are	drawn from consideration.	
Application Papers		
9) The specification is objected to by the Exam		
10) The drawing(s) filed on is/are: a)	• •	-
Applicant may not request that any objection to Replacement drawing sheet(s) including the cor		
11) The oath or declaration is objected to by the		• •
Priority under 35 U.S.C. § 119	· · · · · · · · · · · · · · · · · · ·	
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of:  1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the papplication from the International But * See the attached detailed Office action for a	ents have been received. ents have been received in Appriority documents have been reau (PCT Rule 17.2(a)).	oplication No received in this National Stage
	•	
Address and a		
Attachment(s)  Notice of References Cited (PTO-892)	4) 🗖 Intonio O	ummary (PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s	)/Mail Date
Information Disclosure Statement(s) (PTO-1449 or PTO/SB. Paper No(s)/Mail Date	/08) 5) Notice of In 6) Other:	formal Patent Application (PTO-152)

Application/Control Number: 10/813,170

Art Unit: 3742

#### **DETAILED OFFICE ACTION**

#### INTRODUCTION

1. This application/control number 10/813,170 has been examined. This is the first action on the merits of the claimed invention. The application has claims 1-10 are pending.

## Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 5-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 4. Claim's 5-8 recites the limitation "the surface opposite the heating surface of the substrate strip". There is insufficient antecedent basis for this limitation in the claim. It is unclear which surface considered opposite by applicant.

### Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Stanfield (US5371340).

Stanfield discloses a heater (8) comprising: a heat-resistant, flexible substrate strip (12); a heating wire (40) whose periphery is covered with a heat-resistant insulative layer (34), the

heating wire being disposed on a surface of the substrate strip, the surface being defined as a heating surface; a wrap (14) comprising a heat-resistant resin sheet, wrapping the substrate strip and the heating element; a heat-conductive material (32) between the heating wire and the wrap; and a heat-insulating layer (36) between the wrap and a surface of wire (40) opposite the heating surface of the substrate strip.

7. Claims 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Okamoto (US5394507).

Okamoto teaches as prior art, (Figure 2a, 2b), a pipe-heating structure and a method of applying said structure comprising a tape heater (21) comprising a substrate strip (23), a heating element (22) disposed on a surface of the substrate strip, and a wrap (24) comprising a heat-resistant resin sheet, wrapping the substrate strip and the heating element; and a pipe (1) wound with the tape heater in a spiral manner.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinod D. Patel whose telephone number is 571-272-4785. The examiner can normally be reached on 7.30 A.M. TO 4.00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 3742

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP

Patent Examiner
Art Unit 3742

ROBIN O. EVANS
PRIMARY EXAMINER

8/18/05